AMENDMENTS TO THE CLAIMS

<u>In the claims:</u>

1-64.   (Canceled)

65.   (Currently amended) A method comprising:

coupling an Original Equipment Manufacturer (OEM) bus, an Automotive Multimedia Interface Consortium (AMI-C) bus, and an external network via a gateway device, wherein the OEM bus interconnects OEM vehicle systems that perform vehicle functions, and the AMI-C bus interconnects AMI-C devices;

authenticating devices connected to the AMI-C bus at the gateway device using an application processor<u>, wherein authenticating devices connected to the AMI-C bus at the gateway device using an application processor comprises:</u>

<u>consulting a security database to determine whether a device attempting to access the AMI-C bus via a port node is authorized to communicate with the AMI-C bus; and</u>

<u>if the device is not authorized, instructing the port node to prevent any traffic from the unauthorized device from being passed from the device to the AMI-C bus;</u>

routing communications from at least one of (i) vehicle systems, (ii) AMI-C devices, and (iii) the external network to the application processor using a real time processor in the gateway device;

hosting vehicle applications associated with the OEM vehicle systems and the AMI-C devices on the application processor; and

receiving an external communication at the gateway device and responsively altering a function of a vehicle system.

66.   (Canceled)

67.   (Previously presented) The method of claim 65, wherein the function of the vehicle system is selected from the group consisting of vehicle control functions, security functions, diagnostic functions, and network access functions.

68. (Currently amended) The method of claim 65, further comprising using the gateway device [[node]] to provide a firewall between the AMI-C bus and the OEM bus.

69. (Currently amended) The method of claim 68, wherein the firewall prevents AMI-C devices connected to [[on]] the AMI-C bus from disrupting essential functions of the vehicle.

70. (Previously presented) The method of claim 65, wherein the gateway device is coupled to a local development network, and wherein the gateway device acts as a bridge between the OEM bus, the AMI-C bus, the external network, and a local development network.

71. (Previously presented) The method of claim 70, wherein, in bridging the OEM bus, the AMI-C bus, the external network, and the local development network, the gateway device provides a function selected from the group consisting of protocol translation, security, and privacy functions.

72. (Currently amended) The method of claim 70, wherein the local development network supports ~~high speed~~ wireless transfer of information among a remote information station and at least one of (i) vehicle systems and (ii) AMI-C devices.

73. (Currently amended) The method of claim 70, wherein the gateway device selects a ~~cost-effective~~ communication method for communications between vehicle systems on the OEM bus, AMI-C devices on the AMI-C bus, the external network, and the local development network.

74. (Currently amended) The method of claim 73, wherein an internet coupling provides a low-cost communication method, and wherein a wider coverage communication selected from the group consisting of two-way paging and cellular telephone communication provides a higher-cost communication method, wherein selecting a ~~cost-effective~~ communication method comprises:
    selecting the low-cost communication method for low priority communications; and
    selecting the higher-cost communication method for high priority communications.

75. (Previously presented) The method of claim 74, wherein the low priority communication is a communication selected from the group consisting of uploading of video

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entertainment, uploading of audio entertainment, software upgrading, transfer of vehicle reliability records and transfer of vehicle performance histories.

76.   (Previously presented)   The method of claim 74, wherein the high priority communication is a communication relating to an emergency situation detected by on-board vehicle diagnostics.

77.   (Currently amended)   The method of claim 65, wherein the OED bus is connected to at least one peripheral electronic device, wherein the at least one peripheral electronic device is selected from the group consisting of ~~includes at least one of~~ a climate control device[[s]], a position location device[s], a Global Positioning System device[[s]], a sensor devise[[s]], a switch cluster[[s]], and a device subnetwork[[s]], and wherein the AMI-C bus is connected to at least one peripheral AMI-C electronic device, wherein the at least one peripheral AMI-C electronic device is selected from the group consisting of ~~includes at least one of~~ a pager[[s]], a video device[[s]], an audio device[[s]], a multimedia player[[s]], a personal digital assistant[[s]], and a wireless local area network port[[s]].

78.   (Previously presented)   The method of claim 65, wherein hosting vehicle applications associated with the OEM vehicle systems and the AMI-C devices on the application processor comprises hosting applications associated with at least one of passenger conveniences and vehicle operations.

79.   (Previously presented) The method of claim 65, wherein the applications associated with the OEM vehicle systems and the AMI-C devices are upgradable via input from the gateway device.

80.   (Previously presented)   The method of claim 65, further comprising supporting atomic transactions among vehicle systems on the OEM bus, AMI-C devices on the AMI-C bus, and the external network.

81.   (Previously presented) A gateway device comprising:
an Original Equipment Manufacturer (OEM) bus interface port adapted to communicate with OEM vehicle systems connected to an OEM bus;

an Automotive Multimedia Interface Consortium (AMI-C) bus interface port adapted to communicate with AMI-C device connected to an AMI-C bus;

a gateway port adapted to communicate with an external network, wherein the gateway device couples the OEM bus, the AMI-C bus, and the external network; [[and]]

a real-time information processor ~~and an application processor~~, wherein the real-time information processor is adapted to route communications from at least one of (i) vehicle systems, (ii) AMI-C devices, and (iii) the external network to an application processor; and

an application processor, wherein the application processor is adapted to (i) authenticate AMI-C devices connected to the AMI-C bus and (ii) host vehicle applications associated with the OEM vehicle systems and the AMI-C devices, wherein authenticating devices connected to the AMI-C bus comprises:

consulting a security database to determine whether a device attempting to access the AMI-C bus via a port node is authorized to communicate with the AMI-C bus; and

if the device is not authorized, instructing the port node to prevent any traffic from the unauthorized device from being passed from the device to the AMI-C bus, and

wherein the gateway device is operable to receive an external communication and responsively alter a function of a vehicle system.

82.   (Currently amended) The gateway device of claim 81, further comprising a local development port, wherein the local development port is [[a]] adapted to communicate with a local development network.

83.   (Currently amended) The gateway device of claim 82, wherein the gateway device is operable to act as a bridge between the OEM bus, the AMI-C bus, the external network, and [[a]] the local development network.

84.   (Previously presented) The gateway device of claim 83, wherein, in bridging the OEM bus, the AMI-C bus, the external network, and the local development network, the gateway device is operable to provide a function selected from the group consisting of protocol translation, security, and privacy functions.

85.   (Currently amended) The gateway device of claim 83, wherein the gateway device is operable to select a ~~cost-effective~~ communication method for communications among

vehicle systems on the OEM bus, AMI-C devices on the AMI-C bus, the external network, and the local development network.

[[85]] 86.   (Currently amended)   The gateway device of claim 85 [[84]], wherein selecting a ~~cost-effective~~ communication method comprises:

selecting a low-cost communication method for low priority communications, wherein the low-cost communication method comprises communication via an internet coupling; and

selecting a higher-cost communication method for high priority communications, wherein the high cost communication method comprises communication via a cellular connection.

[[86]] 87.   (Currently amended)   The gateway device of claim 81, wherein the function of the vehicle system is selected from the group consisting of vehicle control functions, security functions, diagnostic functions, and network access functions.

88.   (Previously presented) The gateway device of claim 81, wherein hosting vehicle applications associated with the OEM vehicle systems and the AMI-C devices on the application processor comprises hosting applications associated with at least one of passenger conveniences and vehicle operations.